6620/PCT/Karl Müller [Based on International Application No. PCT/DE2004/000693]

AMENDMENTS TO THE CLAIMS

Claims 1-14 (Canceled).

- (New) An electromotive soil cultivation appliance for cultivating soil comprising a rotary hoe with an asynchronous rotary current motor for driving a rotatable cultivating tool, a frequency converter for generating a drive voltage of adjustable frequency for the rotary current motor, wherein the frequency converter is connected to a manually operated adjusting device for varying frequency of the drive voltage, and wherein the rotary current motor is constructed and arranged so that a nearly constant torque of the rotary current motor is maintained over a range of speeds of the motor and are adjustable by an adjusting device, wherein the nearly constant torque is maintained by adapting or selecting a number of poles and number of turns of the rotary current motor, and wherein a sufficiently high torque is maintained in a lower speed range by providing a correspondingly high number of turn grooves and/or poles.
- 16. (New) The soil cultivation appliance according to claim 15, wherein the rotary current motor maintains said nearly constant torque over a speed range of the rotary current motor from 20 to 6500 rpm.

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- 17. (New) The soil cultivation appliance according to claim 15, wherein the rotary current motor maintains said nearly constant torque over a speed range of the rotary current motor from 10 to more than 3000 rpm.
- 18. (New) The soil cultivation appliance according to claim 15, further comprising maintenance of a sufficiently low inductive resistance in a higher speed range by selecting a correspondingly small number of turns.
- 19. (New) The soil cultivation appliance according to claim 15, wherein the torque of the rotary current motor varies by no more than 10% over a range of motor speeds.
- 20. (New) The soil cultivation appliance according to claim 15, wherein the frequency converter and the adjusting device generate a drive voltage for the rotary current motor that has a maximum frequency in excess of 100 Hz.
- 21. (New) The soil cultivation appliance according to claim 15, further comprising an electromechanical control for reversing polarity of the rotary current motor such that the soil cultivation appliance is operable in a forward mode or a reverse mode, wherein a speed limiter limits speed of the rotary current motor in the reverse mode to no more than 50% of a speed attainable in the forward mode.
- 22. (New) The soil cultivation appliance according to claim 21, wherein the electromechanical control is connected

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to a first switching element and a second switching element that are actuated simultaneously in order to start the appliance, wherein the first switching element must be continuously held in a depressed position by a user against a force of a spring in order to operate the appliance and the second switching element provides for selection of the forward mode or the reverse mode.

- 23. (New) The soil cultivation appliance according to claim 22, wherein the electromechanical control interrupts electrical operation of the appliance for changing over between the forward mode and the reverse mode.
- 24. (New) The soil cultivation appliance according to claim 21, wherein the frequency converter has a direct voltage output for supplying the electromechanical control with power.
- 25. (New) The soil cultivation appliance according to claim 21, wherein the electromechanical control comprises a microprocessor control.
- 26. (New) The soil cultivation appliance according to claim 15, wherein the adjusting device comprises a potentiometer.